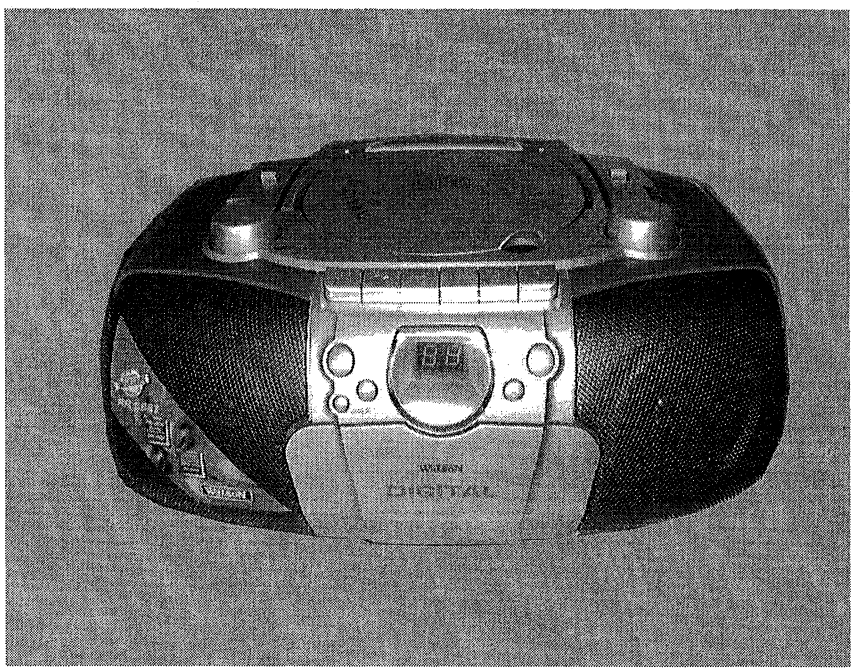
# Watson

## Service Manual

# RR 5887



**KiVi** Service
Windmühlenstr.41
31178 Giesen / Emmerke
Telefon: 05121 / 6002-0
Fax: 05121 / 6002-54

**Ersatzteile und Zubehör**

KiVi # 4002825

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED | DATE: |
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R2 ANT
C101 30pF
D101 1N4148
L102 5x2.5T
L103 5x3.5T
C102 30pF
GND
6BR R101
VC1 20pF
C3
C103
L104 5x3.5T
VC1 C104 22pF
4 5x2.5T L105
R103 10R
R102 22R
C109 6pF
C111 300pF
C110 1uF
C112 0.1uF
C113 0.1uF
R114 3K3
D104 1N4148
C114 1uF
C115 103(M)
C116 103(M)
C117 4.7U
C118 4.7U
Q105 9015
10K R131
Q2 9014C
R105 10K
R106 10K
C119 152(M)
R110 8.2K
C120 152(M)
R406 2K2
R405 6K8
CO/B+
U4 TA2111N
AM(RF/IN) FM(RF/OUT) VCC(RF) FM(OSC) AM(OSC) AFC DET(OUT) MPX(IN) LPF2 LPF1 OUT(L/CH) OUT(R/CH)
FM(RF/IN) RF(GND) AM(LOW/CUT) MIX(OUT) AGC VCC F(AM/IN) F(FM/IN) GND LED(TUN) LED(ST) QUAD
T101 7700
D102 1N4148
C105 150pF
PVC101
C106 0.01uF
R117 100R
SW101A SW/4P3T
AM FM
SK-43D01-G10B
L101 116:9
CF103 30pF
0.02uF C107
C121 0.47uF
C122 4.7uF
470
CF101 455kHz
R118
T102 6549
CF102 10.7MHz
R119 330R
C123 100uF
C124 0.02uF
R120 560R
D103 LED
T103 4935
R109 8.2K
C125 10pF
R107 8K2
R108 8K2
R1 OPEN
R3 OPEN
L108 41MH
L109 41MH
Z0102 3.9V 1/2W
SW101D SK-43D01-G10B SW/4P3T
TO CD+
POWER GND
CD IN
GND
CD IN
RC VCC+ J3-1
RC GND J3-2
R139 1K8
R136 1K8
R137 3K9
R138 3K9
R111 2K2
R112 2K2
SW/4P3T
SK-43D01-G10B SW102A
Q103 2SD862
R134 220R
100uF C176
Z101 9.1V 1/2W
C175 1000uF
SW102C SW/4P3T SK-43D01-G10B
SW102B SW/4P3T SK-43D01-G10B
R153 1R
C160 1000uF/16V
C168
R157 1R/0.5W
SW/4P3T
SW1020 SK-43D01-G10B
AC POWER TRANSFORMER
C170 2200uF
C171 203
C172 203
C173 203
C174 203
D107 IN5392
D109 IN5392
D108 IN5392
D110 IN5392
T1
AC-IN
SW103 SW/2P2T
R-CH OUT J4-1
GND J4-3
L-CH OUT J4-4
L-CH IN J4-5
R-CH IN J4-6
M J4-7
VCC+ J4-8
VCC+ IN J4-9
VCC +8V J4-10
POWER GND J4-11
6K8 R174
6K8 R173
12K R171
12K R172
12K R170
12K R168
183(M) C185
183(M) C186
SW104A SW/2P2T
ST/MO
SK-22F12-G10B
C151 820P
R142 27K
C150 820P
R141 27K
VR A50K VR101A
VR101B VR A50K
1K R144
R143 1K
C153 1uF
C155 600pF
R151 47K
22R R152
100uF C156
20pF
100uF C158
U103 IC/UPC1316C
FILTER M/2 NFB/2 COMP/2 BOO/2 OUT/2 NC LOW/G
GND IN/1 NFB/1 COMP/1 VCC BOO/1 OUT/1 LOW/1
1uF C154
20pF C164
100uF C165
470uF C167
47uF/16V C161
C162 500pF
100uF C163
R154 47K
R155 22R
R156 1R
C166 104
D1 IN4001
C159 470uF
J101 ST/JACK
R158 120R
R159 120R
SPK2
SPK1
16 OHM SPEAKER
16 OHM SPEAKER
DC-12V

LAST Ports:
R179
C193

| | | | |
|---|---|---|---|
| COMPANY: | KENLEX CO. LTD | | |
| TITLE: | K-832 MAIN PARTS | | |
| | ** FOR GEMEX ONLY ** | | |
| DRAWN: K-821FCC.SCH | DATED: 23-2-2001 | CODE: | SIZE: |
| CHECKED: | DATED: | DRAWING NO: FOR TA-2111N | REV: |
| QUALITY CONTROL: | DATED: | | |
| RELEASED: | DATED: | SCALE: | SHEET: OF |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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U101 LA9250M

U301 LC78602

U2 MM1469

Q101 A1346 · Q302 A1346 · Q501 D1936 · Q502 D1936 · Q301 A1346 · Q701 A1346 · Q702 A1346 · Q6 B764 · Q401 9014C

D301 · D302 · D115 · D114 · D113 · D401 1N4148 · D402 1N4148

X301 16 93MHz

LED1

CN22 CON/2P

SW1 REP · SW2 << · SW3 >> · SW4 STOP · SW5 PLAY

L1 · L2 10UH

TOSHIBA TLP2362 · THOMSON 6-PIN-WAFER J5

| | | | |
|---|---|---|---|
| DRAWN: | DATE: | COMPANY: | KENLEX IND. LTD. |
| CHECKED: | DATE: | TITLE: | CD PARTS FOR SONY 16PIN FOR MM1469 DRIVER IC |
| QUALITY CONTROL: | DATE: | CODE: | SIZE: A3 · DRAWING NO: · REV:1 |
| RELEASED: | DATE: | SCALE: | SHEET:1 OF 1 |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
| | | | |
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| | | | |
| | | | |

R203 10K
R209 100K
R210 56K 500pF C206
R211 56K 500pF C207
R212 100K
C205 10uF
SW201A
333(W) C216
R218 6K8
R238 6K8
J1-1 R-CH OUT
J1-2 MIC VCC+
J1-3 LOW GND
J1-4 L-CH OUT
J1-5 R-CH IN
J1-6 L-CH IN
J1-7 M
J1-8 VCC+
J1-9 VCC+ IN
J1-10 VCC+ 8V
J1-11 GND
SW201C SW201B
152(W) C208
R219 15K
R213 33R
R214 4K7
R215 15K
C218 502
R216 47K
R217 3K9
C221 502
C220 0.02
C217 22uF
C219 10uF
C215 4.7uF
R233 150R
R234 68R
R243 3K3
R242 10R
CH2 E.HAED 6PA
CH1A
AP-4211
CH1B
AP-4211
R220 2K2
R221 3K9
C211 0.002
C212 0.002
C213 102(W)
C214 102(W)
R241 3K9
R223 2K2
C224 4.7uF
IC/AN7312
U201
IN/2 NF/2 PCC/2 OUT/2 ALC/2 RIP VCC
IN/1 NF/1 PCC/1 OUT/1 ALC/1 ALC GND
C222 220uF
C223 4.7uF
L202 22uH
TSW
SW201I
SW201D
SW201F
SW201G
SW201E
C225 22uF
C228 10uF
C229 0.02
C227 502
R228 47K
R229 3K9
C230 502
R230 2K2
C231 10uF
JP8
J8
6K8 R239
C237 102(W)
C232 152(W)
R224 15K
R225 33R
R226 4K7
R227 15K
T201
C1
822(W) C238
822(W)
100pF C239
C236 272(W)
100K R235
Q202 9014C
Q203 8050C
C235 203
C234 203
C240 C241 220uF
R236 330R
223(W) R237 3R3
C226 333(W)
SW201H
R231 6KB
R232 10K
C233 203
R244 3.3R 1/2W
C242 0.01uF
C243 VCC+ 100uF/16V
VCC-
MOTOR T1
SW104B
SK-22F12-G10B
SW/2P2T

| | |
|---|---|
| DRAWN: K-881T.SCH | DATED: 5-6-1998 |
| CHECKED: | DATED: |
| QUALITY CONTROL: | DATED: |
| RELEASED: | DATED: |

COMPANY: KENLEX CO. LTD

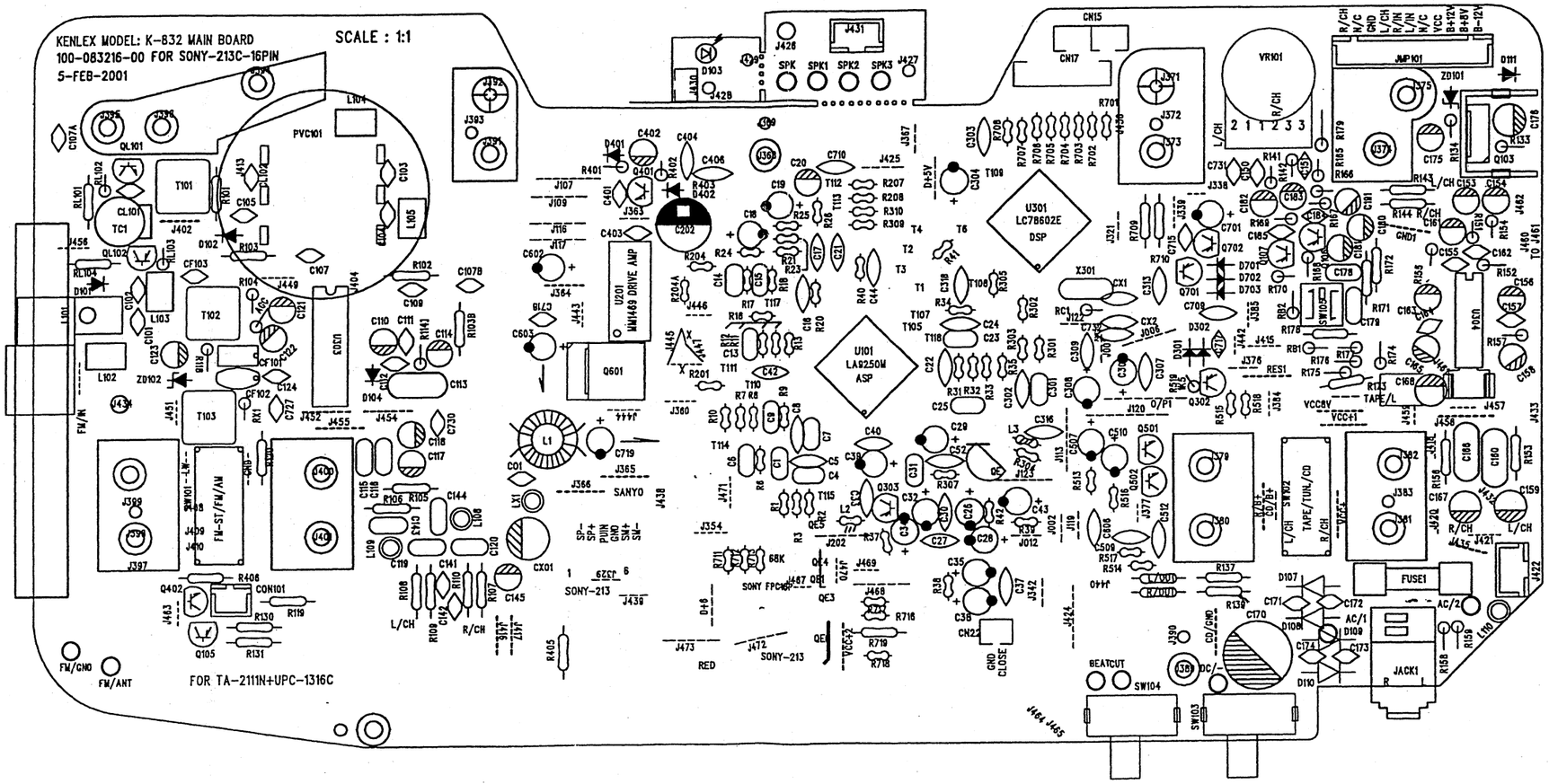
TITLE: CASS BOARD PART
K-832 W/AC BAIS

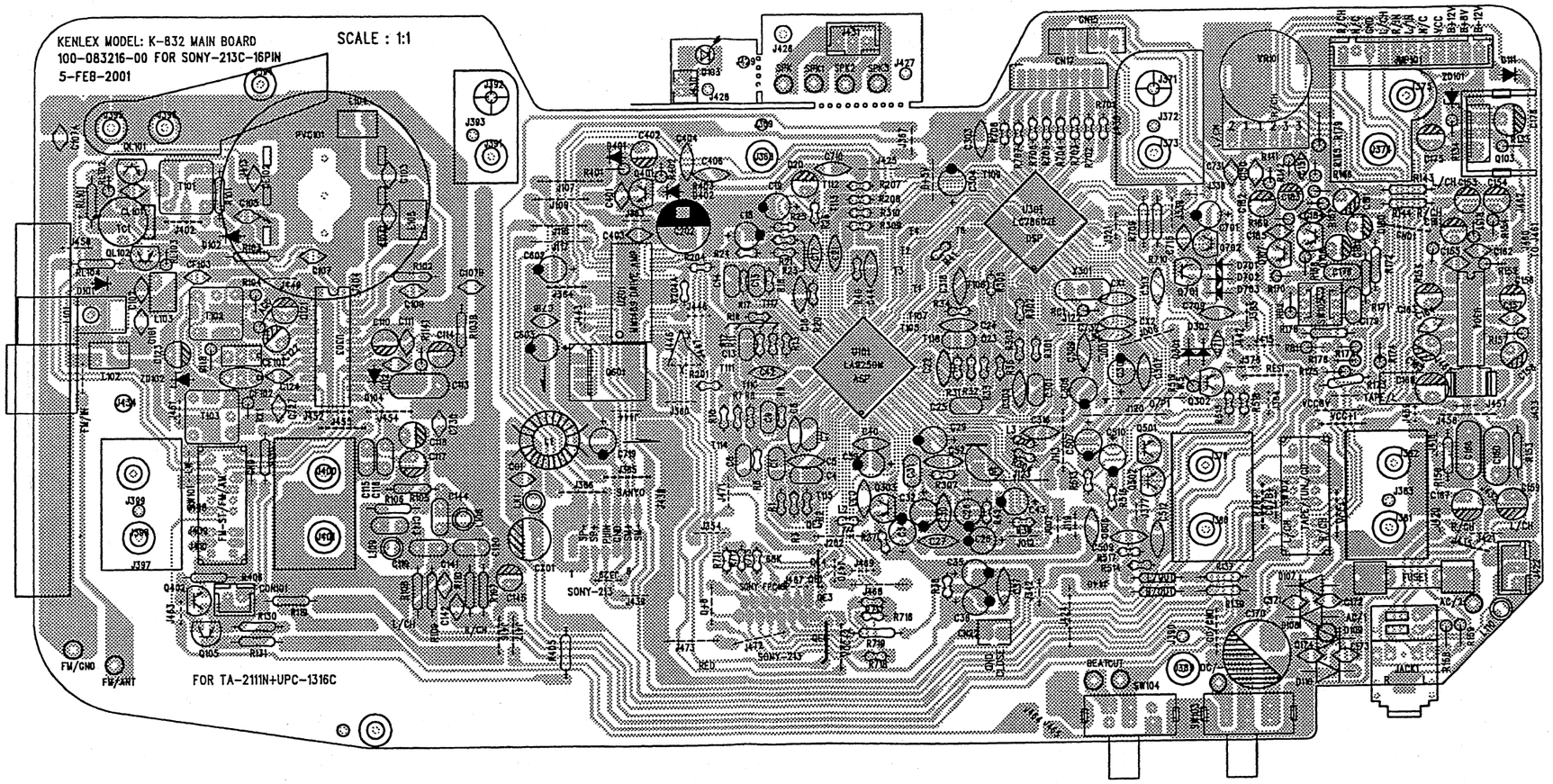
| CODE: | SIZE: | DRAWING NO: | REV: |
|---|---|---|---|
| | | | |

SCALE: SHEET: OF

KENLEX MODEL: K-832 MAIN BOARD
100-083216-00 FOR SONY-213C-16PIN
5-FEB-2001

SCALE : 1:1




KENLEX MODEL: K-832 MAIN BOARD
100-083216-00 FOR SONY-213C-16PIN
5-FEB-2001
SCALE : 1:1
FOR TA-2111N+UPC-1316C
SONY-213
FM/GND
FM/ANT
BEATCUT
SW104
JACK1
FUSE1
REST
TAPE/
L/CH
R/CH

| Artikelnummer | Artikelbeschreibung |
|---|---|
| 12216 | 50K LAUTSTÄRKEREGLER DREHPOTI STEREO |
| 52023 | DREHKONDENSATOR 2X126PF, 2X20PF |
| 176910 | 12141088872 NETZTRAFO |
| 9927913 | 471518 SCHIEBESCHALTER 2x8PIN/2FACH |
| 617812 | 472014 BANDUMSCHALTER |
| 305666 | A/W-SCHALTER |
| 326773 | DRUCKSCHALTER 6PIN STEHENDMINI |
| 326817 | FEDERSCHALTER CD DECKEL 3POL |
| 784582 | SCHALTER SCHIEBE 2XUM |
| 408494 | TASTER 6X6-H:1,0-LIEG-4PIN |
| 98392 | 2SB772 TRANSISTOR (Y, Q, ...) |
| 9901464 | 2SC8050D TRANSISTOR |
| 327368 | 2SC9012H TRANSISTOR |
| 292024 | 2SC9014C TRANSISTOR |
| 369788 | 2SC9015C TRANSISTOR |
| 360221 | 2SD882P NF/S-L, LO-SAT, 40V, 3A, 10W, 90MHZ |
| 474232 | 311543 2SC3400 TRANSISTOR |
| 80700 | 1N4148 DIODE 31A |
| 208896 | 1N5392 DIODE |
| 82580 | 3,9V-0,5W ZENERDIODE 31ASO73 |
| 83470 | 9,1V-0,5W ZENERDIODE 31ASO73 |
| 81450 | LED-3MM-ROT DIODESO33 |
| 326822 | AN7312 IC REC-PLAY TAPE ICDIP14 |
| 173842 | TA2111N ICDIP24 |
| 862439 | UPC1316C IC NF-ENDSTUFE |
| 444859 | 560326 TELESKOPANTENNE |
| 28202 | FERRITSTAB 10X70MM |
| 86234 | 16,9344 MHZ QUARZ METALLGEHÄUSE |
| 866330 | 10,7MHZ FILTER 3PIN |
| 86230 | 4935 FM-ZF-FILTER PINK |
| 12160 | 6549 AM FILTER GELB |
| 177056 | 7700 FILTER ROT |
| 69245 | SFU465Y FILTER 465KHZ 3PIN |
| 28112 | 16POL STECKBUCHSE FÜR FLEXKABEL |
| 326885 | KOPFHÖRERBUCHSE 3,5MM 9PIN |
| 69374 | QUETSCHVERBINDER FÜR BLANKE NETZKABEL |
| 4002825 | S-RR5887 |
| 176919 | BLECHWINKEL FÜR AW-SCHALTER |
| 4002813 | LED DISPLAY ROT 2DIGITS 10POL 20 X 16MM RM:2,54MM |
| 172794 | ABDECKUNG LASEREINHEITKSS213 |
| 172792 | DÄMPFUNGSGUMMI CD LAUFWERK GRÜN HART |
| 172793 | DÄMPFUNGSGUMMI CD LAUFWERK ROT SOFT |
| 176905 | 16R-2W LAUTSPRECHER D=77MM SCHWARZE KAPPE |
| 177068 | CASSETTENLAUFWERK SINGLE 12VMAGNETLÖSCHK. |
| 7008244 | KSM213CJM CD LAUFWERK FÜR SENKRECHTBETRIEB |
| 4002815 | RR5887 PHOTO |
| 4002816 | RR5887 SILBER GERÄT KPL. |
| 4002826 | B-RR5887 |
| 103755 | 100UH SPULE RADIAL-GELB |
| 103761 | 10UH SPULEAXIAL |
| 119856 | 2,0MH SPULE RADIAL SCHWARZ |
| 12191 | 22UH SPULE-RADIAL-GELB |
| 69300 | 4932 SPULE LÖSCHOSZILLATOR |
| 7014345 | 16POL FLEXKABEL L=90MM FÜR KSS213 |
| 7005 | NETZKABEL-EURO BLANKES ENDE1,5MTR. |